

Navy Advancement Center

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Advancement Handbook for Aviation Boatswain's Mate Fuels

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PREFACE

The purpose of the Advancement Handbook is to help you focus your preparation for Navywide advancement-in-rating examinations. The bibliographies (BIBs) together with this handbook form a comprehensive examination study package. Since this handbook provides skill and knowledge components for each paygrade of the Aviation Boatswain's Mate Fuels rating, it helps you concentrate your study on those areas that may be tested. This feature will help you get the most out of your study time.

Each page in Parts 1 through 4 of this Advancement Handbook presents general skill areas, specific skill areas, the knowledge factors associated with each skill area, the pertinent references that address each skill, and the subject areas that may be covered on the examination. The skill statements describe the skills you are expected to perform for each paygrade. The skill statements are cumulative; that is, you are responsible for the skills for the paygrade you are competing for, your present paygrade, and all paygrades below.

Although this handbook is very comprehensive, it cannot cover all the tasks performed in the rating. As a result, the advancement examinations may contain questions more detailed than described in the "*Exam Expectations*" section of the skill areas.

Remember that advancement competition is keen, so your keys to advancement include not only comprehensive advancement examination study but also sustained superior performance.

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Part 1

Advancement Handbook for ABF3

Advancement Handbook for ABF3

General ABF <i>Skill Area</i>	Quality Surveillance
A <i>skill</i> you are expected to perform from the General Skill Area above:	Conduct fuel sampling
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Location of sample connections • Location of laboratories • Location of tank sounding tubes • Fuel sample labeling procedures • Sample bottle cleaning procedures • Aircraft defueling procedures
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Aviation Fuel Systems, Volume 2, Chapter 5 (NAVSEA 0905-LP-092-4050) • Air Department Standard Operating Procedures (SOP), Chapter 8 (COMNAVAIRPAC/COMNAVAIRLANT 3100.4B) • Fuels Management Afloat Manual, Chapter 4 (CINCLANTFLTINST/CINCPACFLTINST 4026.1) • CV NATOPS Manual, Chapter 6 (NAVAIR 00-80T-105) • Aircraft Refueling NATOPS Manual, Chapters 3, 6, 9, 11, 12, and 15 (NAVAIR 00-80T-109) • Aircraft Refueling Handbook, Chapter 4 and Appendix C (MIL-HDBK-844(AS)) • Maintenance and Operation of Petroleum Fuel Facilities, (NAVFAC MO-230) Chapter 5 (NAVFAC 0525-LP-452-4800) • Military Standardization Handbook, Quality Surveillance Handbook for Fuels, Lubrication, and Related Products, Chapters 4 and 5 and Table III (MIL-HDBK-200G) • Naval Ships' Technical Manual, Chapter 541, Ship Fuel and Fuel Systems, Sections 1, 9, and 10 (S9086-SN-STM-010/CH-541)

	<ul style="list-style-type: none"> • Naval Ships' Technical Manual, Chapter 542, Gasoline and JP-5 Fuel Systems, Sections 1, 4, and 7 (S9086-SP-STM-010/CH-542) • Aircraft Fuel/Defuel Stations in CV and CVN'S with Cla-Val Installations, Chapter 3 (S9542-AL-MMM-010) • Fuel Management Ashore, Chapters 2, 4, and 9 (NAVSUP PUB 558)
<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about all aspects of fuel sampling to include sample bottle cleaning procedures, location of sample connections, and defueling procedures. The questions may be of a general nature or specific to a type equipment or procedure.</p>

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General ABF <i>Skill Area</i>	Quality Surveillance
A <i>skill</i> you are expected to perform from the General Skill Area above:	Operate JP-5 test equipment
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Free water test procedures • Solid contamination testing procedures • Flashpoint testing procedures • Fuel system icing inhibitor (FSII) testing procedures • Specific gravity testing procedures • Identifying types of contamination • Recording test results
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Air Department Standard Operating Procedures (SOP), Chapter 8 (COMNAVAIRPAC-COMNAVAIRLANT 3100.4B) • Fuels Management Afloat Manual, Chapter 4 (CINCLANTFLTINST/CINCPACFLTINST 4026.1) • Aircraft Refueling NATOPS Manual, Chapters 9 and 15 and Appendix A (NAVAIR 00-80T-109) • Aircraft Refueling Handbook, Chapters 4 and 5 (MIL-HDBK-844(AS)) • Military Standardization Handbook, Quality Surveillance Handbook for Fuels, Lubrication, and Related Products, Chapters 3, 4, 9, and 12 and Table (X) (MIL-HDBK-200G) • Naval Ships' Technical Manual, Chapter 541, Ship Fuel and Fuel Systems, Section 10 (S9086-SN-STM-010/CH-541) • Naval Ships' Technical Manual, Chapter 542, Gasoline and JP-5 Fuel Systems, Section 7 (S9086-SP-STM-010/CH-542)

	<ul style="list-style-type: none"> • Description, Operation, and Maintenance, JP-5 Jet Fuel Centrifugal Purifier, Chapter 4 (S9542-AB-MMO-010)
<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about all aspects of operating JP-5 test equipment, identifying types of contamination, and recording test results. The questions maybe of a general nature or specific to a type of equipment or procedure.</p>

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General ABF <i>Skill Area</i>	Quality Surveillance
A <i>skill</i> you are expected to perform from the General Skill Area above:	Troubleshoot and maintain JP-5 test equipment
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Calibration and maintenance of the combined contaminated fuel detector, (CCFD). • Calibration and maintenance of the flashpoint test equipment. • Calibration and maintenance of the B-2 / (FSII) test equipment. • Drafting and utilizing calibration and conversion charts • Documenting test results
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Air Department Standard Operating Procedures (SOP), Chapter 8 (COMNAVAIRPAC-COMNAVAIRLANT 3100.4B) • Aircraft Refueling Handbook, Chapters 4 and 5 (MIL-HDBK-844 (AS)) • Military Standardization Handbook, Quality Surveillance Handbook for Fuels, Lubrication, and Related Products, Chapter 4, Appendices G and H (MIL-HDBK-200G) • Naval Ships' Technical Manual, Chapter 541, Ship Fuel and Fuel Systems, Section 10 (S9086-SN-STM-010/CH-541) • Naval Ships' Technical Manual, Chapter 542, Gasoline and JP-5 Fuel Systems, Section 7 (S9086-SP-STM-010/CH-542) • Description, Operation, and Maintenance, JP-5 Jet Fuel Centrifugal Purifier, Chapter 4 (S9542-AB-MMO-010) • Aircraft Refueling NATOPS Manual, Chapters 3, 9, and 15 (NAVAIR 00-80T-109)

<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about all aspects of JP-5 fuel test equipment to include the maintenance and calibration of all quality assurance test equipment and use of the calibration/conversion tables. The questions maybe of a general nature or specific to a type of equipment or procedure.</p>
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General ABF <i>Skill Area</i>	JP-5 Below Decks System Operations
A <i>skill</i> you are expected to perform from the General Skill Area above:	Operate 2000 gallon JP-5 filter separator
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Location of filter rooms • Identifying filter components • Filter operating procedures • Emergency procedures • Casualty procedures • Locating air supply and exhaust motor power boxes
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Aviation Fuel Systems, Volume 2 Chapter 5 (NAVSEA 0905-LP-092-4050) • Air Department Standard Operating Procedures (SOP), Chapter 8 (COMNAVAIRPAC-COMNAVAIRLANT 3100.4B) • Fuels Management Afloat Manual, Chapter 2 (CINCLANTFLTINST/CINCPACFLTINST 4026.1) • Aircraft Refueling NATOPS Manual, Chapter 17 (NAVAIR 00-80T-109) • Naval Ships' Technical Manual .Chapter 074, Volume 3, Gas Free Engineering, Section 21 (S9086-CH-STM-030/CH-074) • Naval Ships' technical Manual, Chapter 555-Volume 3 Surface Ships Firefighting, Section 2 (S0986-S3-STM-010/CH-555V1) • Naval Ships' Technical Manual, Chapter 541, Ship Fuel and Fuel Systems, Section 9 (S9086-SN-STM-010/CH-541) • Naval Ships' Technical Manual, Chapter 542, Gasoline and JP-5 Fuel Systems, Section 4 (S9086-SP-STM-010/CH-542)

	<ul style="list-style-type: none"> • Technical Manual for 2,000 G.P.M. Filter Separator, Sections 2 and 3 (S9550-AL-MMM-010/GFS-134-58-V-2000) • General Specifications for Ships' of the United States Navy, Section 542 (S9AAO-AA-SPN-010/GEN-SPEC)
<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about all aspects of the 2000-gallon JP-5 filter separator to include filter components and operating and casualty procedures. The questions may be of a general nature or specific to a type equipment or procedure.</p>

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General ABF <i>Skill Area</i>	JP-5 Below Decks Systems Operations
A <i>skill</i> you are expected to perform from the General Skill Area above:	Operate and monitor liquid level indicators
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Operation of tank level indicator • Monitoring liquid level indicating meter using control consoles • Monitoring high level alarms using control console • Operation of high level alarm • Operation of in-tank equipment • Casualty procedures
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Aviation Fuel Systems, Volume 2 Chapter 10 (NAVSEA 0905-LP-092-4050) • Air Department Standard Operating Procedures (SOP), Chapter 8 (COMNAVAIRPAC-COMNAVAIRLANT 3100.4B) • Naval Ships' Technical Manual, Chapter 541, Ship Fuel and Fuel Systems, Section 9 (S9086-SN-STM-010/CH-541) • Naval Ships' Technical Manual, Chapter 542, Gasoline and JP-5 Fuel Systems, Sections 1, 4, and 6 (S9086-SP-STM-010/CH-542) • Operation, Maintenance, Installation of Delaval, Gems Sensors Division Tank Level Indicating and Control System (TLICS) Volume One of Two, Chapters 1-7 (NAVSEA 0965-LP-080-3010) • Maintenance, Grooming, and Troubleshooting Instructions, Tank Level Indicating (TLI) System, Sections 1, 2, 4, 5, and 7 (NAVSEA 0965-LP-060-1010) • General Specifications for Ships' of the United States Navy, Section 542 (S9AAO-AA-SPN-010/GEN-SPEC)

<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about all aspects of the JP-5 liquid level indicator to include operation of the liquid level indicator, operation of the high level alarm in relation to the liquid level indicator, and function of in-tank equipment. The questions may be of a general nature or specific to a type of equipment or procedure.</p>
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General ABF <i>Skill Area</i>	JP-5 below Decks Systems Operations
A <i>skill</i> you are expected to perform from the General Skill Area above:	Operate fill and transfer system
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Location of transfer pumps • Location of fill and transfer system isolation valves • Receiving JP-5 from a barge procedures • Transferring JP-5 to a barge procedures • Receiving JP-5 from shore procedures • Transferring JP-5 from ship to shore procedures • Receiving JP-5 from another ship procedures • Transferring JP-5 to another ship procedures • Transferring JP-5 between stowage tanks procedures • Transferring JP-5 from stowage tanks to service tanks procedures • Transferring JP-5 from stowage tanks to cargo JP-5 /NSFO procedures • Transferring JP-5 to and from secondary shield tanks procedures • Transferring JP-5 through reclamation system procedures • Transferring JP-5 to centrifugal purifier procedures • Receiving defuel through fill and transfer main procedures • Receiving JP-5 from stripping system procedures • Monitoring fill and transfer system using control consoles • Distinguishing between JP-5 overflow or ballast stowage tanks, JP-5 or ballast stowage tanks, inner bottom stowage tanks, and shield tanks, using control console

	<ul style="list-style-type: none"> • Underway replenishment casualty and emergency procedures • General Specifications for Ships' of the United States Navy, Section 542 (S9AAO-AA-SPN-010/GEN-SPEC)
<p><i>References you should study to gain the knowledge you need to perform this skill:</i></p>	<ul style="list-style-type: none"> • Aviation Fuel Systems, Volume 2, Chapter 5, (NAVSEA 0905-LP-092-4050) • Air Department Standard Operating Procedures (SOP), Chapter 8, (COMNAVAIRPAC-COMNAVAIRLANT 3100.4B) • Fuels Management Afloat Manual, Chapter 2 (CINCLANTFLTINST/CINCPACFLTINST 4026.1) • Naval Ships' Technical Manual, Chapter 079, Volume 2-Damage Control Practical Damage Control, Section 21, (S9068-CN-STM-020/CH-079) • Naval Ships' Technical Manual, Chapter 505, Piping Systems, Sections 1, 5, 6, 8, and 9, (S9086-RK-STM-010/CH-505) • Naval Ships' Technical Manual, Chapter 541, Ship Fuel and Fuel Systems, Sections 1, 3 and 4, (S9086-SN-STM-010/CH-541) • Naval Ships' Technical Manual, Chapter 542, Gasoline and JP-5 Fuel Systems, Sections 3, 4, 5, and 6 (S9086-SP-STM-010/CH-542) • Maintenance Manual for JP-5 Transfer Pump Model NO BHXL4NFD-TB, (300-GPM) Description, Operation, and Maintenance, Chapters 2 and 3 (S6226-MT-MMI-010) • Maintenance Manual for JP-5 Transfer Pumps Model X3NF-GMA, (200-GPM), Chapters 2 and 3 (S6225-Z9-MMA-010/07524) • Technical Manual for 300 G.P.M. Filter Separator, Chapter 2 (S9550-AK-MMM-010) • General Specifications for Ships' of the United States Navy, Section 542 (S9AAO-AA-SPN-010/GEN-SPEC)

<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about all aspects of the fill and transfer system to include transferring and receiving JP-5 operating procedures. The questions may be of a general nature or specific to a type equipment or procedure.</p>
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General ABF <i>Skill Area</i>	JP-5 Below Decks System Operations
A <i>skill</i> you are expected to perform from the General Skill Area above:	Operate centrifugal purifier
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Location of purifiers • Location of purifier isolation valves • Location of service tank fill valves • Pre and post operating procedures • Purifier operating procedures • Purifier stand-by procedures • Emergency stop procedures • Monitoring service tank liquid level indicators using control console • Monitoring centrifugal purifier operations using control console
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Aviation Fuel Systems, Volume 2, Chapter 5 (NAVSEA 0905-LP-092-4050) • Air Department Standard Operating Procedures (SOP), Chapter 8 (COMNAVAIRPAC-COMNAVAIRLANT 3100.4B) • Naval Ships' Technical Manual, Chapter 541, Ship Fuel and Fuel Systems, Sections 4 and 9 (S9086-SN-STM-010/CH-541) • Naval Ships' Technical Manual, Chapter 542, Gasoline and JP-5 Fuel Systems, Sections 4 and 6 (S9086-SP-STM-010/CH-542) • Description, Operation, and Maintenance, JP-5 Jet Fuel Centrifugal Purifier, Chapters 1-4 (S9542-AB-MMO-010) • Operation, Maintenance, Installation of Delaval, Gems Sensors Division Tank Level Indicating and Control System (TLIC) Volume One of Two, Chapters 1-4 (NAVSEA 0965-LP-080-3010)

	<ul style="list-style-type: none"> • General Specifications for Ships' of the United States Navy, Section 542 (S9AAO-AA-SPN-010/GEN-SPEC)
<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about all aspects of the JP-5 centrifugal purifier to include pre operating procedures, operating procedures and post operating procedures. The questions may be of a general nature or specific to a type equipment or procedure.</p>

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General ABF <i>Skill Area</i>	JP-5 Below Decks System Operations
A <i>skill</i> you are expected to perform from the General Skill Area above:	Operate JP-5 service system
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Location of JP-5 service pumps • Location of JP-5 service pump isolation valves • Location of JP-5 service system isolation valves • JP-5 service pump operating procedures • JP-5 service pump pressure switch operating procedure • JP-5 service system operating procedures • Monitoring JP-5 service system operation using the control consoles • Emergency procedures • Casualty procedures
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Aviation Fuel Systems, Volume 2, Chapter 5 (NAVSEA 0905-LP-092-4050) • Air Department Standard Operating Procedures (SOP), Chapter 8 (COMNAVAIRPAC-COMNAVAIRLANT 3100.4B) • Naval Ships' Technical Manual, Chapter 541, Ship Fuel and Fuel Systems, Sections 1, 4, 5, 9, and 15 (S9086-SN-STM-010/CH-541) • Naval Ships' Technical Manual, Chapter 542, Gasoline and JP-5 Fuel Systems, Section 1, 4, and 6 (S9086-SP-STM-010/CH-542) • CV NATOPS Manual, Chapter 6 (NAVAIR 00-80T-105) • Aircraft Refueling NATOPS Manual, Chapter 6 (NAVAIR 00-80T-109) • JP-5 Pumps Drawing Numbers, AB294-0541-000 and 294-0628-000, Chapters 1 and 2 (S6225-T9-MMA-010)

	<ul style="list-style-type: none"> • General Specifications for Ships' of the United States Navy, Section 542 (S9AAO-AA-SPN-010/GEN-SPEC)
<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about all aspects of the JP-5 service system to include JP-5 service pump operating procedures, and JP-5 service tanks. The questions may be of a general nature or specific to a type equipment or procedure.</p>

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General ABF <i>Skill Area</i>	JP-5 Below Decks System Operations
A <i>skill</i> you are expected to perform from the General Skill Area above:	Operate JP-5 stripping system
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Location of JP-5 motor driven stripping pumps • Location of JP-5 hand stripping pumps • Location of JP-5 stripping system isolation valves • JP-5 stowage tank stripping procedures • JP-5 service tank stripping procedures • JP-5 purifier drain tank stripping procedures • JP-5 stripping to transfer system procedures • Monitoring motor driven stripping operations using control console • Monitoring hand stripping operations using control console
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Aviation Fuel Systems, Volume 2, Chapter 7 (NAVSEA 0905-LP-092-4050) • Air Department Standard Operating Procedures (SOP), Chapter 8 (COMNAVAIRPAC-COMNAVAIRLANT 3100.4B) • Naval Ships' Technical Manual, Chapter 541, Ship Fuel and Fuel Systems, Sections 4, 5, 6, and 9 (S9086-SN-STM-010/CH-541) • Naval Ships' Technical Manual, Chapter 542, Gasoline and JP-5 Fuel Systems, Sections 1, 4, 6, and 7 (S9086-SP-STM-010/CH-542) • Aircraft Refueling NATOPS Manual, Chapter 1 (NAVAIR 00-80T-109) • Maintenance Manual for JP-5 Tank Stripping Pump, Sections 1 and 2 (S6226-E7-MMI-010/07524)

	<ul style="list-style-type: none"> • Maintenance manual for JP-5 Pump model X2NFB-NHROV, Chapters 2 and 3 (S6225-TE-MMA-010) • General Specifications for Ships' of the United States Navy, Section 542 (S9AAO-AA-SPN-010/GEN-SPEC)
<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about all aspects of the JP-5 stripping system to include motor driven and hand strip operating procedures. The questions may be of a general nature or specific to a type equipment or procedure.</p>

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General ABF <i>Skill Area</i>	Below Decks System Operations
A <i>skill</i> you are expected to perform from the General Skill Area above:	Operate flood and drain system
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Location of eductor and fire main valves • Fixed eductor operating procedures • Fire main operating procedures • Bilge educting procedures • Purifier drain tank educting procedures • Ballast stowage tanks operating procedures • Educting stowage tank operating procedures
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Aviation Fuel Systems, Volume 2, Chapter 10 (NAVSEA 0905-LP-092-4050) • Air Department Standard Operating Procedures (SOP), Chapter 8 (COMNAVAIRPAC-COMNAVAIRLANT 3100.4B) • Naval Ships' Technical Manual, Chapter 541, Ship Fuel and Fuel Systems, Sections 6 and 7 (S9086-SN-STM-010/CH-541) • Naval Ships' Technical Manual, Chapter 542, Gasoline and JP-5 Fuel Systems, Sections 1 and 4 (S9086-SP-STM-010/CH-542) • Naval Ships' Technical Manual, Chapter 079, Volume 2-Damage Control Practical Damage Control, Sections 25, 30, and 34 (S9068-CN-STM-020/CH-079) • Naval Occupational Safety and Health (NAVOSH) Program manual for Forces Afloat, Volumes One, Two, and Three, Chapter C-10 (OPNAVINST 5100.19C) • General Specifications for Ships' of the United States Navy, Section 542 (S9AAO-AA-SPN-010/GEN-SPEC)

<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about all aspects of the flood and drain system and firemain operating procedures The questions may be of a general nature or specific to a type of equipment or procedure.</p>
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General ABF <i>Skill Area</i>	JP-5 Below Decks System Operations
A <i>skill</i> you are expected to perform from the General Skill Area above:	Operate JP-5 auxiliary system
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Location of JP-5 auxiliary pumps • Location of JP-5 auxiliary system isolation valves • Auxiliary pump operating procedures • Auxiliary system operating procedures
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Aviation Fuel Systems, Volume 2, Chapter 8 (NAVSEA 0905-LP-092-4050) • Air Department Standard Operating Procedures (SOP), Chapter 8 (COMNAVAIRPAC-COMNAVAIRLANT 3100.4B) • Naval Ships' Technical Manual, Chapter 542, Gasoline and JP-5 Fuel Systems, Section 4 (S9086-SP-STM-010/CH-542) • Maintenance Manual for JP-5 Pump Model X2NFB-MMA-NHROV, Chapters 2 and 3 (S6225-YE-MMA-010) • General Specifications for Ships' of the United States Navy, Section 542 (S9AAO-AA-SPN-010/GEN-SPEC)
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about all aspects of the JP-5 auxiliary system to include auxiliary pump and system operating procedures. The questions may be of a general nature or specific to a type of equipment or procedure.

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General ABF <i>Skill Area</i>	JP-5 Below Decks Systems Operations
A <i>skill</i> you are expected to perform from the General Skill Area above:	Operate jet test system
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Location of jet test pump • Location of jet test filter • Location of jet test system isolation valves • Jet test pump operating procedures • Jet test system operating procedures • Jet test emergency procedures • Jet test casualty procedures
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Aviation Fuel Systems, Volume 2, Chapter 9 (NAVSEA 0905-LP-092-4050) • Air Department Standard Operating Procedures (SOP), Chapter 8 (COMNAVAIRPAC-COMNAVAIRLANT 3100.4B) • Naval Ships' Technical Manual, Chapter 542, Gasoline and JP-5 Fuel Systems, Section 4 (S9086-SP-STM-010/CH-542) • Technical Manual for 300 G.P.M. Filter-Separator, Section 3 (S9550-AK-MMM-010) • General Specifications for Ships' of the United States Navy, Section 542 (S9AAO-AA-SPN-010/GEN-SPEC)
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about all aspects of the JP-5 jet test system to include the jet test pump and filter operating procedures. The questions may be of a general nature or specific to a type of equipment or procedure.

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General ABF <i>Skill Area</i>	JP-5 Below Decks Systems Maintenance
A <i>skill</i> you are expected to perform from the General Skill Area above:	Troubleshoot and repair JP-5 valves
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Locating and identifying type and size of valves • Troubleshooting manual operated valves • Repairing manually operated valve procedures • Troubleshooting electrically operated (limitorque) valves • Repairing electrically operated valve (Limatorque) procedures • Monitoring valve position indicator for manually operated valves using control console • Monitoring valve position indicator for electrically operated valves using control console
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Aviation Fuel Systems, Volume 2, Chapter 5 (NAVSEA 0905-LP-092-4050) • Air Department Standard Operating Procedures (SOP), Chapter 8 (COMNAVAIRPAC-COMNAVAIRLANT 3100.4B) • Naval Ships' Technical Manual, Chapter 541, Ship Fuel and Fuel Systems, Sections 2, 8, and 9 (S9086-SN-STM-010/CH-541) • Naval Ships' Technical Manual, Chapter 505, Piping Systems, Sections 1 and 9 (S9086-RK-STM-010/CH-505) • Maintenance Manual for Limatorque Valve Operators Type LT-130, LT-150, LT-550, Sections 1, 4, 5, and 6 (S6435-PB-MMA-010/52374) • General Specifications for Ships' of the United States Navy, Section 542 (S9AAO-AA-SPN-010/GEN-SPEC)

<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about all aspects of troubleshooting and repairing manually and electrically operated valves. The questions may be of a general nature or specific to a type of equipment or procedure.
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General ABF <i>Skill Area</i>	JP-5 Below Decks Systems Maintenance
A <i>skill</i> you are expected to perform from the General Skill Area above:	Troubleshoot piping and flange shield Installation
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Identifying pipe type and size • Hydrostatic testing procedures for piping • Pipe repairing procedures • Applying pipe repair material • Identifying flange (spray) shield size and installation location • Installing flange (spray) shield procedures
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Aviation Fuel Systems, Volume 2, Chapter 3 (NAVSEA 0905-LP-092-4050) • Air Department Standard Operating Procedures (SOP), Chapter 8 (COMNAVAIRPAC-COMNAVAIRLANT 3100.4B) • Naval Ships' Technical Manual, Chapter 541, Ship Fuel and Fuel Systems, Sections 2, 8, and 9 (S9086-SN-STM-010/CH-541) • Naval Ships' Technical Manual, Chapter 542, Gasoline and JP-5 Fuel Systems, Section 2 (S9086-SP-STM-010/CH-542) • Naval Ships' Technical Manual, Chapter 505, Piping Systems, Sections 1, 7, and 8 (S9086-RK-STM-010/CH-505) • General Specifications for Ships' of the United States Navy, Section 542 (S9AAO-AA-SPN-010/GEN-SPEC)

<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about all aspects of pipe troubleshooting, the use and installation of flange (spray) shields within the fuel system. The questions may be of a general nature or specific to a type of equipment or procedure.</p>
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Advancement Handbook for ABF3

General ABF <i>Skill Area</i>	JP-5 Below Decks Systems Maintenance
A <i>skill</i> you are expected to perform from the General Skill Area above:	Troubleshoot pumps and calibrate gages
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • JP-5 service pump troubleshooting procedures • JP-5 (200) gpm transfer pump troubleshooting procedures • JP-5 (300) gpm transfer pump troubleshooting procedures • JP-5 stripping pump troubleshooting procedures • JP-5 auxiliary pump troubleshooting procedures • JP-5 jet test pump troubleshooting procedures • Removing, calibrating, and reinstalling pressure gauge procedures
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Aviation Fuel Systems, Volume 2, Chapters 5, 7, and 9 (NAVSEA 0905-LP-092-4050) • Air Department Standard Operating Procedures (SOP), Chapter 8 (COMNAVAIRPAC-COMNAVAIRLANT 3100.4B) • Naval Ships' Technical Manual, Chapter 541, Ship Fuel and Fuel Systems, Sections 4, 5, 6, and 9 (S9086-SN-STM-010/CH-541) • Naval Ships' Technical Manual, Chapter 542, Gasoline and JP-5 Fuel Systems, Sections 1, 3, 4, and 6 (S9086-SP-STM-010/CH-542) • Maintenance manual for JP-5 Tank Stripping Pump, Sections 1 and 2 (S6226-E7-MMI-010/07524) • Maintenance Manual for JP-5 Transfer Pumps Model X3NF-GMA, (200-GPM), Chapters 2, 5, and 6 (S6225-Z9-MMA-010/07524)

	<ul style="list-style-type: none"> • Maintenance Manual for JP-5 Transfer Pump Model NO BHXL4NFD-TB, (300-GPM) Description, Operation, and Maintenance, Chapters 2, 5, and 6 (S6226-MT-MMI-010) • JP-5 Pumps Drawing Numbers, AB294-0541-000 and 294-0628-000, Chapters 2, 5, and 6 (S6225-T9-MMA-010) • The Naval Aviation Maintenance Program (NAMP), Volume V, Chapter 19 (OPNAVINST 4790.4G) • General Specifications for Ships' of the United States Navy, Section 542 (S9AAO-AA-SPN-010/GEN-SPEC)
<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about all aspects of troubleshooting and maintaining JP-5 centrifugal and positive displacement pumps and calibrating pressure gages procedures The questions may be of a general nature or specific to a type of equipment or procedure.</p>

Advancement Handbook for ABF3

General ABF <i>Skill Area</i>	JP-5 Below Decks Systems Maintenance
A <i>skill</i> you are expected to perform from the General Skill Area above:	Maintaining JP-5 centrifugal purifier
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Location of purifier • Operating procedures for special purifier tools • Purifier self cleaning procedures • Purifier cleaning procedures • Purifier maintaining procedures • Purifier inspecting procedures • Troubleshooting procedures
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Aviation Fuel Systems, Volume 2, Chapter 5 (NAVSEA 0905-LP-092-4050) • Air Department Standard Operating Procedures (SOP), Chapter 8 (COMNAVAIRPAC-COMNAVAIRLANT 3100.4B) • Naval Ships' Technical Manual, Chapter 541, Ship Fuel and Fuel Systems, Section 9 (S9086-SN-STM-010/CH-541) • Naval Ships' Technical Manual, Chapter 542, Gasoline and JP-5 Fuel Systems, Sections 4 and 6 (S9086-SP-STM-010/CH-542) • Aircraft Refueling NATOPS Manual, Chapter 7 (NAVAIR 00-80T-109) • Description, Operation, and Maintenance, JP-5 Jet Fuel Centrifugal Purifier, Chapters 4, 5, and 6 (S9542-AB-MMO-010) • General Specifications for Ships' of the United States Navy, Section 542 (S9AAO-AA-SPN-010/GEN-SPEC)

<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about all aspects of the centrifugal purifier to include maintaining, cleaning, and inspecting procedures. The questions may be of a general nature or specific to a type of equipment or procedure.</p>
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Advancement Handbook for ABF3

General ABF <i>Skill Area</i>	Catapult Lube Oil Systems Operations
A <i>skill</i> you are expected to perform from the General Skill Area above:	Operate lube oil systems
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Location of lube oil pump • Location of lube oil system isolation valves • Lube oil pump operating procedures • Lube oil system operating procedures • Duplex strainer operating procedures
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Air Department Standard Operating Procedures (SOP), Chapter 8 (COMNAVAIRPAC-COMNAVAIRLANT 3100.4B) • Naval Ships' Technical Manual, Chapter 505, Piping Systems, Section 10 (S9086-RK-STM-010/CH-505) • Naval Ships' Technical Manual Chapter 542 Gasoline and JP-5 Fuel Systems, Section 1 (S9086-SP-STM-010/CH-542)
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about all aspects of the catapult lube oil system to include lube oil equipment operating procedures. The questions may be of a general nature or specific to a type of equipment or procedure.

Advancement Handbook for ABF3

General ABF <i>Skill Area</i>	Catapult Lube Oil Systems Maintenance
A <i>skill</i> you are expected to perform from the General Skill Area above:	Troubleshoot catapult lube oil system
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Location of the lube oil pump • Location of lube oil system isolation valves • Equipment maintenance procedures
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Air Department Standard Operating Procedures (SOP), Chapter 8 (COMNAVAIRPAC-COMNAVAIRLANT 3100.4B) • Naval Ships' Technical Manual, Chapter 505, Piping Systems, Section 10 (S9086-RK-STM-010/CH-505) • Naval Ships' Technical Manual Chapter 542 Gasoline and JP-5 Fuel Systems, Section 1 (S9086-SP-STM-010/CH-542) • Aircraft Refueling NATOPS Manual, Chapter 7 (NAVAIR 00-80T-109)
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about all aspects of the catapult lube oil system to include maintaining and troubleshooting equipment procedures. The questions may be of a general nature or specific to a type of equipment or procedure.

Advancement Handbook for ABF3

General ABF <i>Skill Area</i>	Flight and Hanger Deck Operations
A <i>skill</i> you are expected to perform from the General Skill Area above:	Perform refueling and defueling operations
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Location of aircraft refueling stations • Location of support equipment refueling stations • Location of small boat refueling stations • Aircraft grounding procedures • Location of aircraft grounding points • Aircraft refuel station operating procedures • Aircraft refueling procedures • Aircraft defueling procedures • Support equipment refueling procedures • Small boat refueling procedures • Pressure nozzle operating procedures • Overwing nozzle operating procedures • Aircraft refueling station casualty and emergency procedures
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Aviation Fuel Systems, Volume 2, Chapters 5 and 8 (NAVSEA 0905-LP-092-4050) • Air Department Standard Operating Procedures (SOP), Chapter 8 (COMNAVAIRPAC-COMNAVAIRLANT 3100.4B) • Naval Ships' Technical Manual, Chapter 542, Gasoline and JP-5 Fuel Systems, Sections 1, 2, 4, and 6 (S9086-SP-STM-010/CH-542) • Aircraft Refueling NATOPS Manual, Chapters 5 and 6 (NAVAIR 00-80T-109) • CV NATOPS Manual, Chapter 6 (NAVAIR 00-80T-105) • Aircraft Refueling Handbook, Chapter 6 (MIL-HDBK-844 (AS))

	<ul style="list-style-type: none"> • Aircraft Fuel/Defuel Stations in CV and CVN'S with Cla-Val Installations, Chapters 1, 2, and 3 (S9542-AL-MMM-010) • Electrical Continuity Control System for Aircraft JP-5 Fueling Stations, Sections 1-4 (SG120-AB-MMO-010) • Military Handbook Electrical Grounding for Aircraft Safety Sections 1-5 (MIL-HDBK-274(AS)) • Pressure Fuel Servicing Locking Nozzle, Technical Manual, Section 1 (NAVAIR 12-1CA-1) • General Specifications for Ships' of the United States Navy, Section 542 (S9AAO-AA-SPN-010/GEN-SPEC)
<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about all aspects of the aircraft flight and hanger deck refueling and defueling systems and associated equipment. The questions may be of a general nature or specific to a type of equipment or procedure.</p>

Advancement Handbook for ABF3

General ABF <i>Skill Area</i>	Flight and Hanger Deck Equipment Maintenance
A <i>skill</i> you are expected to perform from the General Skill Area above:	Maintain refueling and defueling equipment
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Location of aircraft refueling stations • Location of support equipment refueling stations • Location of small boat refueling stations • Fuel hose repairing procedures • Pressure nozzle troubleshooting and repairing procedures • Over wing nozzle troubleshooting and repairing procedures • Quick disconnect coupling troubleshooting and repairing procedures • JP-5 defuel pump troubleshooting and repairing procedures • Automatic fueling and defueling valve troubleshooting and repairing procedures • Refueling station hose reel troubleshooting and repairing procedures
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Aviation Fuel Systems, Volume 2, Chapter 5 (NAVSEA 0905-LP-092-4050) • Air Department Standard Operating Procedures (SOP), Chapter 8 (COMNAVAIRPAC-COMNAVAIRLANT 3100.4B) • Naval Ships' Technical Manual, Chapter 542, Gasoline and JP-5 Fuel Systems, Sections 1, 2, 4, and 6 (S9086-SP-STM-010/CH-542) • Aircraft Refueling NATOPS Manual, Chapter 5 (NAVAIR 00-80T-109) • Aircraft Fuel/Defuel Stations in CV and CVN'S with Cla-Val Installations, Chapters 3-6 (S9542-AL-MMM-010)

	<ul style="list-style-type: none"> • Electrical Continuity Control System for Aircraft JP-5 Fueling Stations, Sections 2-5 (SG120-AB-MMO-010) • Pressure Fuel Servicing Locking Nozzle, Technical Manual, Sections 2-7 (NAVAIR 12-1CA-1) • General Specifications for Ships' of the United States Navy, Section 542 (S9AAO-AA-SPN-010/GEN-SPEC)
<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about all aspects of maintaining and troubleshooting flight and hanger deck refueling and defueling stations and associated equipment. The questions may be of a general nature or specific to a type of equipment or procedure.</p>

Advancement Handbook for ABF3

General ABF <i>Skill Area</i>	Motor Gasoline (MOGAS) System Operations
A <i>skill</i> you are expected to perform from the General Skill Area above:	Operate motor gasoline (MOGAS) system
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Location of gasoline pumps • Location of filter • Location of booster pumps • Location of isolation valves • Location of pressure gages • Location of refueling stations • System operating procedures
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Air Department Standard Operating Procedures (SOP), Chapter 8 (COMNAVAIRPAC-COMNAVAIRLANT 3100.4B) • Naval Ships' Technical Manual, Chapter 542, Gasoline and JP-5 Fuel Systems, Sections 1-3 and 6 (S9086-SP-STM-010/CH-542) • Environmental and Natural Resources Program Manual, Chapters 3, 10, 16, 19, and 21 (OPNAVINST 5090.1B) • General Specifications for Ships' of the United States Navy, Section 542 (S9AAO-AA-SPN-010/GEN-SPEC) • Naval Ships' Technical Manual, Chapter 593, Pollution Control, Sections 1,3 and 5 (S9086-T8-STM-010/CH-593) • Naval Ships' Technical Manual, Chapter 503, PUMPS, Section 2 (S986-RH-STM-010/CH-503) • General Specifications for Ships' of the United States Navy, Section 542 (S9AAO-AA-SPN-010/GEN-SPEC)

<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about all aspects of the motor gasoline (MOGAS) system to include equipment-operating procedures. The questions may be of a general nature or specific to a type of equipment or procedure.</p>
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Advancement Handbook for ABF3

General ABF <i>Skill Area</i>	Motor Gasoline (MOGAS) Inert Gas System Operation
A <i>skill</i> you are expected to perform from the General Skill Area above:	Operate motor gasoline (MOGAS) inert gas systems
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Location and identification of nitrogen cylinders • Location and identification of carbon dioxide cylinders • Cofferdam inerting procedures • Double-wall piping inerting procedures • Inert gas systems operating procedures • Portable Inertness Analyzer (PIA) operating procedures
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Air Department Standard Operating Procedures (SOP), Chapter 8 (COMNAVAIRPAC-COMNAVAIRLANT 3100.4B) • Naval Ships' Technical Manual, Chapter 542, Gasoline and JP-5 Fuel Systems, Sections 1-3 and 6 (S9086-SP-STM-010/CH-542) • General Specifications for Ships' of the United States Navy, Section 542 (S9AAO-AA-SPN-010/GEN-SPEC) • Naval Ships' Technical Manual, Chapter 074, Gas Free Engineering, Sections 20 and 24 (S9086-CH-STM-030/CH-074)
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about all aspects of the motor gasoline (MOGAS) inerting system to include test equipment-operating procedures. The questions may be of a general nature or specific to a type of equipment or procedure.

Advancement Handbook for ABF3

General ABF <i>Skill Area</i>	Shore Base Operations
A <i>skill</i> you are expected to perform from the General Skill Area above:	Operate shore base refueling and defueling equipment
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Refueling truck operating procedures • Defueling truck operating procedures • Truck parking requirements • Load rack operating procedures • Location of filter/separator • Monitoring filter/separator • Location of fuel meters • Monitoring fuel meters • Aircraft refueling procedures • Aircraft defueling procedures • Conducting pre and post operating inspections for refueling and defueling trucks • Observing safety precautions for shore facility and equipment • Reporting safety hazards • Spill prevention • Identifying and determining size of spill • Identifying fire extinguishing equipment • Operating fire extinguishing equipment
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Aircraft Refueling NATOPS Manual, Chapters 9-12, 14, and 16-18 (NAVAIR 00-80T-109) • Fuel Management Ashore, Chapters 2, 5, and 7-10 (NAVSUP PUB 558) • Department of Defense Handbook, Petroleum Fuels Facilities, Sections 3, 4, and 7 (MIL-HDBK-1022) • Military Handbook, Electrical Engineering Cathodic Protection, Sections 1-3 (MIL-HDBK-1004/10)

	<ul style="list-style-type: none"> • Maintenance and Operation of Petroleum Fuel Facilities, NAVFAC MO-230, Chapters 1-5 (NAVFAC 0525-LP-452-4800) • Technical Manual, NAVAIROSH Requirements for the Shore Establishment, Chapters 1, 3, and 5-7 (NAVAIR A1-NAOSH- SAF-000/P-5100-1)
<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about all aspects of the shore refueling facility to include, safety, operating, inspecting and maintaining related equipment. The questions may be of a general nature or specific to a type of equipment or procedure.</p>

Part 2

Advancement Handbook for ABF2

Advancement Handbook for ABF2

General ABF <i>Skill Area</i>	Quality Surveillance
A <i>skill</i> you are expected to perform from the General Skill Area above:	Verify fuel samples
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Location of fuel testing laboratories • Fuel sample labeling procedures • Shipping instructions • Test equipment operating procedures • Classification of sample • Test result documentation
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Air Department Standard Operating Procedures (SOP), Chapter 8 (COMNAVAIRPAC/COMNAVAIRLANT 3100.4B) • Fuels Management Afloat Manual, Chapter 4 and Appendix A (CINCLANTFLTINST/CINCPACFLTINST 4026.1) • Aircraft Refueling NATOPS Manual, Chapters 3, 9, 11, 12, and 15 (NAVAIR 00-80T-109) • Aircraft Refueling Handbook, Chapters 4, 5, and Appendix B (MIL-HDBK-844(AS)) • Military Standardization Handbook, Quality Surveillance Handbook for Fuels, Lubrication, and Related Products, Chapters 4 and 5, Table III, and Appendix (I) (MIL-HDBK-200G) • Naval Ships' Technical Manual, Chapter 541, Ship Fuel and Fuel Systems, Sections 1 and 10 (S9086-SN-STM-010/CH-541) • Naval Ships' Technical Manual, Chapter 542, Gasoline and JP-5 Fuel Systems, Sections 1 and 7 (S9086-SP-STM-010/CH-542)

<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about all aspects of fuel sampling to include procedures and instructions for delivering fuel samples to military petroleum laboratories and test equipment operating procedures. The questions may be of a general nature or specific to a type equipment or procedure.</p>
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Advancement Handbook for ABF2

General ABF <i>Skill Area</i>	JP-5 Below Decks System Operations
A <i>skill</i> you are expected to perform from the General Skill Area above:	Monitor below decks systems operations
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • JP-5 centrifugal purifier operations • JP-5 stripping operations • JP-5 reclamation systems operations • JP-5 auxiliary service systems operations • JP-5 jet test systems operations • JP-5 service systems operations • JP-5 filters operations • JP-5 transfer systems operations • JP-5 control console operations • JP-5 tank level indicators • Motor gasoline systems operations
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • CV NATOPS Manual, Chapter 6 (NAVAIR 00-80T-105) • Aircraft Refueling NATOPS Manual, Chapters 1, 6, and 17 (NAVAIR 00-80T-109) • Aviation Fuel Systems, Volume 2, Chapters 3-11 (NAVSEA 0905-LP-092-4050) • Air Department Standard Operating Procedures (SOP), Chapter 8 (COMNAVAIRPAC-COMNAVAIRLANT 3100.4B) • Fuels Management Afloat Manual, Chapters 2-4 (CINCLANTFLTINST/CINCPACFLTINST 4026.1) • Naval Ships' Technical Manual, Chapter 541, Ship Fuel and Fuel Systems, Sections 1, 3-6, 9, and 15 (S9086-SN-STM-010/CH-541) • Naval Ships' Technical Manual, Chapter 542, Gasoline and Fuel Systems, Sections 1-7 (S9086-SP-STM-010/CH-542)

	<ul style="list-style-type: none"> • General Specifications for Ships' of the United States Navy, Section 542 (S9AAO-AA-SPN-010/GEN-SPEC) • Naval Ships' Technical Manual, Chapter 555 Volume 1 , Surface Ship Fire fighting, Section 3 (S0986-S3-STM-010/CH-555V1) • Naval Ships' Technical Manual, Chapter 505, Piping Systems, Sections 1, 5, 6, 8, and 9 (S9086-RK-STM-010/CH-505) • Naval Ships' Technical Manual, Chapter 074, Gas Free Engineering, Section 21 (S9086-CH-STM-030/CH-074) • Naval Ships' Technical Manual, Chapter 079, Volume 2-Damage Control Practical Damage Control, Section 21 (S9068-CN-STM-020/CH-079) • Maintenance, Grooming, and Troubleshooting Instructions, Tank Level Indicating (TLI) System, Sections 1, 2, 4, 5, and 7 (NAVSEA 0965-LP-060-1010) • Operation, Maintenance, Installation of Delaval, Gems Sensors Division Tank Level Indicating and Control System (TLIC) Volume One of Two, Chapters 1-7 (NAVSEA 0965-LP-080-3010)
<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about all aspects of the JP-5 below decks systems operation to include equipment-operating procedures. The questions may be of a general nature or specific to a type equipment or procedure.</p>

Advancement Handbook for ABF2

General ABF <i>Skill Area</i>	JP-5 Below Decks System Maintenance
A <i>skill</i> you are expected to perform from the General Skill Area above:	Monitor below decks systems maintenance
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Overhauling valves • Repairing JP-5 positive displacement pumps • Overhauling positive displacement pumps • Repairing centrifugal pumps • Repairing centrifugal purifiers • Troubleshooting service filters • Repairing service filters • Overhauling service filters
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Aviation Fuel Systems, Volume 2, Chapters 5, 7, and 8 (NAVSEA 0905-LP-092-4050) • Air Department Standard Operating Procedures (SOP), Chapter 8 (COMNAVAIRPAC-COMNAVAIRLANT 3100.4B) • Naval Ships' Technical Manual, Chapter 541, Ship Fuel and Fuel Systems, Sections 2, 4-6, 8, and 9 (S9086-SN-STM-010/CH-541) • Naval Ships' Technical Manual, Chapter 542, Gasoline and JP-5 Fuel Systems, Sections 1, 3, 4, and 6 (S9086-SP-STM-010/CH-542) • General Specifications for Ships' of the United States Navy, Section 542 (S9AAO-AA-SPN-010/GEN-SPEC) • Naval Ships' Technical Manual, Chapter 505, Piping Systems, Sections 1 and 9 (S9086-RK-STM-010/CH-505) • Maintenance Manual for Limitorque Valve Operators Types LT-130, LT-150, LT-550 Sections 1 and 4-6 (S6435-PB-MMA-010/52374)

	<ul style="list-style-type: none"> • Maintenance Manual for JP-5 Transfer Pumps Model X3NF-GMA, (200-GPM), Chapters 2, 5, and 6 (S6225-Z9-MMA-010/07524) • Maintenance Manual for JP-5 Transfer Pump Model NO BHXL4NFD-TB, (300-GPM) Description, Operation, and Maintenance, Chapters 2, 5, and 6 (S6226-MT-MMI-010) • JP-5 Pumps Drawing Numbers, AB294-0541-000 AND 294-0628-000, Chapters 2, 5, and 6 (S6225-T9-MMA-010) • Description, Operation, and Maintenance, JP-5 Jet Fuel Centrifugal Purifier, Chapters 4-6 (S9542-AB-MMO-010) • Technical Manual for 2000 GPM Filter Separator, Section 4 (S9550AL-MMM-010/GFS-134-58-V-2000) • Technical Manual for 300 GPM Filter-Separator, Section 4 (S9550-AK-MMM-010) • Type 1 Technical Manual for JP-5 Fuel Filter GF-5-V-CU-NI (Pre-Filter) Section 7 (S6436 AZ MMA 010) • Maintenance Manual for JP-5 Tank Stripping Pump, Chapter 4, (S6226-E7-MMI-010/07524) • Maintenance Manual for JP-5 Pump, Model-X2NFB-NHROV, Chapters 4-6. (S225-YE-MMA-010)
<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about all aspects of maintaining JP-5 below decks operating equipment. The questions may be of a general nature or specific to a type equipment or procedure.</p>

Advancement Handbook for ABF2

General ABF <i>Skill Area</i>	Catapult Lube Oil Systems Operations
A <i>skill</i> you are expected to perform from the General Skill Area above:	Operate catapult lube oil systems
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Monitoring procedures when receiving by truck • Monitoring procedures when receiving by barrel • Documenting quantity before and after receiving • Documenting quantity before and after issuing • Location of system isolation valves • Pump operating procedures • System operating procedures • Duplex strainer operating procedures
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Air Department Standard Operating Procedures (SOP), Chapter 8 (COMNAVAIRPAC-COMNAVAIRLANT 3100.4B) • Naval Ships' Technical Manual, Chapter 505, Piping Systems, Section 10 (S9086-RK-STM-010/CH-505) • Naval Ships' Technical Manual Chapter 542 Gasoline and JP-5 Fuel Systems, Section 1 (S9086-SP-STM-010/CH-542)
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about all aspects of the catapult lube oil system to include lube oil equipment operating procedures. The questions may be of a general nature or specific to a type of equipment or procedure.

Advancement Handbook for ABF2

General ABF <i>Skill Area</i>	Catapult Lube Oil Systems Maintenance
A <i>skill</i> you are expected to perform from the General Skill Area above:	Troubleshoot catapult lube oil system
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Troubleshooting and repairing lube oil pump • Location of lube oil system isolation valves • Troubleshooting and repairing lube oil system isolation valves • Repairing and overhauling automatic relief valves • Repairing lube oil piping
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Air Department Standard Operating Procedures (SOP), Chapter 8 (COMNAVAIRPAC-COMNAVAIRLANT 3100.4B) • Naval Ships' Technical Manual, Chapter 505, Piping Systems, Sections 9 and 10 (S9086-RK-STM-010/CH-505) • Naval Ships' Technical Manual Chapter 542 Gasoline and JP-5 Fuel Systems, Section 1 (S9086-SP-STM-010/CH-542) • Naval Ships' Technical Manual Chapter 079, Volume-2 Damage Control Practical Damage Control, Sections 34 and 42 (S9086-CN STM 020/CH-079)
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about all aspects of the catapult lube oil system to include maintaining and troubleshooting equipment procedures. The questions may be of a general nature or specific to a type of equipment or procedure.

Advancement Handbook for ABF2

General ABF <i>Skill Area</i>	Flight/hanger Deck Operations
A <i>skill</i> you are expected to perform from the General Skill Area above:	Monitor flight and hanger deck operations
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Maintaining aircraft fuel status board • Emergency defueling procedures • Reviewing defuel request form • Documenting daily aircraft fuel issue • Documenting de-fueled aircraft • Reviewing checker cards • Reviewing control talker fueling and defueling log
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Aviation Fuel Systems, Volume 2, Chapter 5 (NAVSEA 0905-LP-092-4050) • Air Department Standard Operating Procedures (SOP), Chapter 8 (COMNAVAIRPAC-COMNAVAIRLANT 3100.4B) • Fuels Management Afloat Manual, Chapter 3 (CINCLANTFLTINST/CINCPACFLTINST 4026.1) • Naval Ships' Technical Manual, Chapter 542, Gasoline and JP-5 Fuel Systems, Sections 1, 2, and 4 (S9086-SP-STM-010/CH-542) • Aircraft Refueling NATOPS Manual, Chapter 6 (NAVAIR 00-80T-109) • CV NATOPS Manual, Chapter 6 (NAVAIR 00-80T-105) • Aircraft Fuel/Defuel Stations in CV and CVN'S with Cla-Val Installations, Chapters 1-3 (S9542-AL-MMM-010) • General Specifications for Ships' of the United States Navy, Section 542 (S9AAO-AA-SPN-010/GEN-SPEC)

<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about all aspects of aircraft flight and hanger deck refueling and defueling operations and equipment. The questions may be of a general nature or specific to a type of equipment or procedure.</p>
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Advancement Handbook for ABF2

General ABF <i>Skill Area</i>	Flight/Hanger Deck Equipment Maintenance
A <i>skill</i> you are expected to perform from the General Skill Area above:	Monitor troubleshooting and repair of flight and hanger deck equipment
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Fuel hose repair • Pressure nozzle troubleshooting and repair • Over wing nozzle troubleshooting and repair • Quick disconnect coupling troubleshooting and repair • JP-5 defuel pump troubleshooting and repair • Automatic fueling and defueling valve troubleshooting and repair • Refueling station hose reel troubleshooting and repair • Overhauling valves main deck and above • Troubleshooting fueling station electrical continuity systems
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Aviation Fuel Systems, Volume 2, Chapter 5 (NAVSEA 0905-LP-092-4050) • Air Department Standard Operating Procedures (SOP), Chapter 8 (COMNAVAIRPAC-COMNAVAIRLANT 3100.4B) • Naval Ships' Technical Manual, Chapter 542, Gasoline and JP-5 Fuel Systems, Sections 4 and 6 (S9086-SP-STM-010/CH-542) • Aircraft Fuel/Defuel Stations in CV and CVN'S with Cla-Val Installations, Chapters 4-6 (S9542-AL-MMM-010) • Electrical Continuity Control System for Aircraft JP-5 Fueling Stations, Sections 2-5 (SG120-AB-MMO-010) • Pressure Fuel Servicing Locking Nozzle, Technical Manual, Sections 2-8 (NAVAIR 12-1CA-1)

	<ul style="list-style-type: none"> • General Specifications for Ships' of the United States Navy, Section 542 (S9AAO-AA-SPN-010/GEN-SPEC) • Naval Ships' Technical Manual, Chapter 505, Piping Systems, Sections 1, 9, and 10 (S9086-RK-STM-010/CH-505)
<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about all aspects of maintaining and troubleshooting flight and hanger deck refueling and defueling stations and associated equipment. The questions may be of a general nature or specific to a type of equipment or procedure.</p>

Advancement Handbook for ABF2

General ABF <i>Skill Area</i>	Motor Gasoline (MOGAS)/Inert gas Systems Operation and Maintenance
A <i>skill</i> you are expected to perform from the General Skill Area above:	Monitor motor gasoline/inert gas systems operation and maintenance
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • MOGAS system operating procedures • MOGAS system drain back procedures • MOGAS filling and seawater aligning procedures • MOGAS receiving procedures • MOGAS stripping system operating procedures • MOGAS automatic pressure regulating system troubleshooting procedures • Inert gas systems operating procedures • Inert gas systems maintenance procedures
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Air Department Standard Operating Procedures (SOP), Chapter 8 (COMNAVAIRPAC-COMNAVAIRLANT 3100.4B) • Naval Ships' Technical Manual, Chapter 542, Gasoline and JP-5 Fuel Systems, Sections 1-3 and 6 (S9086-SP-STM-010/CH-542) • Naval Ships' Technical Manual, Chapter 074, Gas Free Engineering, Sections 20 and 24 (S9086-CH-STM-030/CH-074) • General Specifications for Ships' of the United States Navy, Section 542 (S9AAO-AA-SPN-010/GEN-SPEC) • Naval Ships' Technical Manual, Chapter 593, Pollution Control, Sections 1, 3 and 5 (S9086-T8-STM-010/CH-593) • Environmental and Natural Resources Program Manual, Chapters 3, 10, 16, 19, and 21 (OPNAVINST 5090.1B)

<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about all aspects of motor gasoline (MOGAS) and inert gas systems to include operating and maintenance procedures. The questions may be of a general nature or specific to a type of equipment or procedure.</p>
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Advancement Handbook for ABF2

General ABF <i>Skill Area</i>	Shore Base Operations
A <i>skill</i> you are expected to perform from the General Skill Area above:	Monitor shore base refueling and defueling operations
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Receiving fuel from a tank truck • Receiving fuel from pipelines • Dispatch responsibilities • Refuel truck operating procedures • Defuel truck operating procedures • Aircraft refueling procedures • Aircraft defueling procedures • Performing tandem refueling • Tank dike drain operating procedures • Preparing fuel issue documents • Preparing defuel certificates • Reviewing fuel issue documentation • Reviewing defuel certification documents
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Aircraft Refueling NATOPS Manual, Chapters 9-12, 14, and 16-18 (NAVAIR 00-80T-109) • Fuel Management Ashore, Chapters 2, 3, and 7-10 (NAVSUP PUB 558) • Department of Defense Handbook, Petroleum Fuels Facilities, Sections 2-4, 8, 9, and 12 (MIL-HDBK-1022) • Military Handbook, Electrical Engineering Cathodic Protection, Sections 1-3 (MIL-HDBK-1004/10) • Maintenance and Operation of Petroleum Fuel Facilities, NAVFAC MO-230, Chapters 1, 2, and 5 (NAVFAC 0525-LP-452-4800)

<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about all aspects of the shore base fueling and defueling operation to include receiving, storing, and issuing. The questions may be of a general nature or specific to a type of equipment or procedure.</p>
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Advancement Handbook for ABF2

General ABF <i>Skill Area</i>	Aviation Fuels Technical Administration
A <i>skill</i> you are expected to perform from the General Skill Area above:	Monitor fuel surveillance and fuels security watches
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Preparing aviation fuels security watch bill • Monitoring duties and responsibilities of the duty AVFUELS petty officer • Monitoring duties and responsibilities of the aviation fuels security watch • Monitoring duties and responsibilities of the quality surveillance petty officer • Reviewing quality surveillance log sheets and log books • Monitoring test equipment operations
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Air Department Standard Operating Procedures (SOP), Chapter 8 (COMNAVAIRPAC/COMNAVAIRLANT 3100.4B) • Fuels Management Afloat Manual, Chapter 3 (CINCLANTFLTINST/CINCPACFLTINST 4026.1) • CV NATOPS Manual, Chapter 6 (NAVAIR 00-80T-105) • Aircraft Refueling NATOPS Manual, Chapters 2, 3, 5, 9, and 15 (NAVAIR 00-80T-109) • Naval Ships' Technical Manual, Chapter 541, Ship Fuel and Fuel Systems, Sections 1 and 10 (S9086-SN-STM-010/CH-541) • Naval Ships' Technical Manual, Chapter 542, Gasoline and JP-5 Fuel Systems, Sections 1 and 7 (S9086-SP-STM-010/CH-542) • Aircraft Refueling Handbook, Chapters 2, 5, and 6 (MIL-HDBK-844(AS))

	<ul style="list-style-type: none"> • Military Standardization Handbook, Quality Surveillance Handbook for Fuels, Lubrication, and Related Products, Chapters 4, 5, and 9 (MIL-HDBK-200G)
<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about all aspects of the aviation fuels security watch and quality surveillance procedures. The questions may be of a general nature or specific to a type equipment or procedure.</p>

Part 3

Advancement Handbook for ABF1

Advancement Handbook for ABF1

General ABF <i>Skill Area</i>	JP-5 Below Decks System Operations
A <i>skill</i> you are expected to perform from the General Skill Area above:	Monitor below decks systems operations
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Monitoring JP-5 below decks systems operations • Monitoring JP-5 fill and transfer systems operation • Monitoring JP-5 service systems operations • Monitoring JP-5 filter casualty procedures • Monitoring flood and drain system operations
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Aircraft Refueling NATOPS Manual, Chapters 3-6 (NAVAIR 00-80T-109) • Aviation Fuel Systems, Volume 2, Chapters 1 and 4-10 (NAVSEA 0905-LP-092-4050) • Air Department Standard Operating Procedures (SOP), Chapter 8 (COMNAVAIRPAC-COMNAVAIRLANT 3100.4B) • Fuels Management Afloat Manual, Chapters 2-4 (CINCLANTFLTINST/CINCPACFLTINST 4026.1) • Naval Ships' Technical Manual, Chapter 541, Ship Fuel and Fuel Systems, Sections 1 and 3-10 (S9086-SN-STM-010/CH-541) • Naval Ships' Technical Manual, Chapter 542, Gasoline and Fuel Systems, Sections 1-7 (S9086-SP-STM-010/CH-542) • General Specifications for Ships' of the United States Navy, Section 542 (S9AAO-AA-SPN-010/GEN-SPEC) • Technical Manual for 300 G.P.M. Filter Separator, Sections 3-5 (S9550-AK-MMM-010) • Technical Manual for 2,000 G.P.M. Filter Separator, Sections 3 and 4 (S9550AL-MMM-010/GFS-134-58-V-2000)

<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about all aspects of the JP-5 below decks systems operation including equipment-operating procedures. The questions may be of a general nature or specific to a type equipment or procedure.</p>
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Advancement Handbook for ABF1

General ABF <i>Skill Area</i>	JP-5 Below Decks System Maintenance
A <i>skill</i> you are expected to perform from the General Skill Area above:	Monitor below decks systems maintenance
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Overhauling JP-5 centrifugal purifier • Repairing JP-5 centrifugal purifier • Overhauling centrifugal pumps • Repairing piping • Testing centrifugal purifiers • Equipment repair procedures • Equipment overhaul procedures
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Aviation Fuel Systems, Volume 2, Chapter 2 (NAVSEA 0905-LP-092-4050) • Air Department Standard Operating Procedures (SOP), Chapter 8 (COMNAVAIRPAC-COMNAVAIRLANT 3100.4B) • Aircraft Refueling NATOPS Manual, Chapter 7 (NAVAIR 00-80T-109) • Naval Ships' Technical Manual, Chapter 541, Ship Fuel and Fuel Systems, Section 8 (S9086-SN-STM-010/CH-541) • Naval Ships' Technical Manual, Chapter 542, Gasoline and JP-5 Fuel Systems, Sections 3, 4, and 6 (S9086-SP-STM-010/CH-542) • General Specifications for Ships' of the United States Navy, Section 542 (S9AAO-AA-SPN-010/GEN-SPEC) • Naval Ships' Technical Manual, Chapter 505, Piping Systems, Sections 1 and 8 (S9086-RK-STM-010/CH-505) • Naval Ships' Technical Manual, Chapter 503, Pumps, Sections 1 and 2 (S9086-RH-STM-010/CH-503)

	<ul style="list-style-type: none"> • Description, Operation, and Maintenance, JP-5 Jet Fuel Centrifugal Purifier, Chapters 5 and 6 (S9542-AB-MMO-010) • JP-5 Pumps Drawing Numbers, AB294-0541-000 AND 294-0628-000, Chapters 5 and 6 (S6225-T9-MMA-010)
<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about all aspects of maintaining JP-5 below decks operating equipment. The questions may be of a general nature or specific to a type equipment or procedure.</p>

Advancement Handbook for ABF1

General ABF <i>Skill Area</i>	Catapult Lube Oil Systems Operations
A <i>skill</i> you are expected to perform from the General Skill Area above:	Monitor catapult lube oil operations
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Monitoring catapult lube oil systems operation
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Air Department Standard Operating Procedures (SOP), Chapter 8 (COMNAVAIRPAC-COMNAVAIRLANT 3100.4B) • Naval Ships' Technical Manual, Chapter 542 Gasoline and JP-5 Fuel Systems, Section 1 (S9086-SP-STM-010/CH-542)
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about all aspects of the catapult lube oil system including lube oil equipment operating procedures. The questions may be of a general nature or specific to a type of equipment or procedure.

Advancement Handbook for ABF1

General ABF <i>Skill Area</i>	Catapult Lube Oil Systems Maintenance
A <i>skill</i> you are expected to perform from the General Skill Area above:	Monitor catapult lube oil system repair and overhaul
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Repairing lube oil system equipment • Overhauling lube oil system equipment
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Air Department Standard Operating Procedures (SOP), Chapter 8 (COMNAVAIRPAC-COMNAVAIRLANT 3100.4B) • Naval Ships' Technical Manual, Chapter 505, Piping Systems, Section 10 (S9086-RK-STM-010/CH-505) • Naval Ships' Technical Manual, Chapter 542 Gasoline and JP-5 Fuel Systems, Section 1 (S9086-SP-STM-010/CH-542)
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about all aspects of maintaining the catapult lube oil system to include equipment overhaul and repair procedures. The questions may be of a general nature or specific to a type of equipment or procedure.

Advancement Handbook for ABF1

General ABF <i>Skill Area</i>	Flight and Hanger Deck Operations
A <i>skill</i> you are expected to perform from the General Skill Area above:	Monitor flight and hanger deck operations
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Coordinating fuel station flushing operations • Monitoring fuel station flushing operations • Monitoring defueling procedures • Monitoring fueling procedures • Coordinating defuel operations • Emergency defueling procedures • Coordinating emergency defueling operations • Monitoring underway replenishment station operations • Monitoring support equipment refueling operations • Monitoring ship's boats refueling operations • Monitoring fuel systems isolation status
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Aviation Fuel Systems, Volume 2, Chapters 5 and 8 (NAVSEA 0905-LP-092-4050) • Air Department Standard Operating Procedures (SOP), Chapter 8 (COMNAVAIRPAC-COMNAVAIRLANT 3100.4B) • Naval Ships' Technical Manual, Chapter 541, Ship Fuel and Fuel Systems, Sections 1 and 8 (S9086-SN-STM-010/CH-541) • Naval Ships' Technical Manual, Chapter 542, Gasoline and JP-5 Fuel Systems, Sections 1, 4, 6, and 7 (S9086-SP-STM-010/CH-542) • Aircraft Refueling NATOPS Manual, Chapters 5 and 6 (NAVAIR 00-80T-109) • CV NATOPS Manual, Chapter 6 (NAVAIR 00-80T-105)

	<ul style="list-style-type: none"> • Aircraft Fuel/Defuel Stations in CV and CVN'S with Cla-Val Installations, Chapters 2 and 3 (S9542-AL-MMM-010) • General Specifications for Ships' of the United States Navy, Section 542 (S9AAO-AA-SPN-010/GEN-SPEC)
<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about all aspects of aircraft flight and hanger deck refueling and defueling operations and equipment. The questions may be of a general nature or specific to a type of equipment or procedure.</p>

Advancement Handbook for ABF1

General ABF <i>Skill Area</i>	Flight and Hanger Deck Equipment Maintenance
A <i>skill</i> you are expected to perform from the General Skill Area above:	Maintain refueling and defueling equipment
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Pipe repairing procedures main deck and above • Repairing flight deck equipment • Overhauling flight deck equipment • Directing a fuels damage control repair party
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Aviation Fuel Systems, Volume 2, Chapter 5 (NAVSEA 0905-LP-092-4050) • Air Department Standard Operating Procedures (SOP), Chapter 8 (COMNAVAIRPAC-COMNAVAIRLANT 3100.4B) • Naval Ships' Technical Manual, Chapter 541, Ship Fuel and Fuel Systems, Section 8 (S9086-SN-STM-010/CH-541) • Naval Ships' Technical Manual, Chapter 542, Gasoline and JP-5-Fuel Systems, Sections 1, 2, and 6 (S9086-SP-STM-010/CH-542) • Aircraft Refueling NATOPS Manual, Chapter 7 (NAVAIR 00-80T-109) • General Specifications for Ships' of the United States Navy, Section 542 (S9AAO-AA-SPN-010/GEN-SPEC) • Naval Ships' Technical Manual, Chapter 505, Piping Systems, Sections 1, 8, and 10 (S9086-RK-STM-010/CH-505) • Naval Ships' Technical Manual, Chapter 555-Volume 3, Surface Ships Fire fighting, Sections 5 and 8 (S0986-S3-STM-010/CH-555V1)

	<ul style="list-style-type: none"> • Naval Ships' Technical Manual, Chapter 079, Volume 2-Damage Control Practical Damage Control, Section 40 (S9068-CN-STM-020/CH-079)
<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about all aspects of maintaining and troubleshooting flight and hanger deck refueling and defueling stations and associated equipment. The questions may be of a general nature or specific to a type of equipment or procedure.</p>

Advancement Handbook for ABF1

General ABF <i>Skill Area</i>	Motor Gasoline (MOGAS) and Inert gas Systems Operation and Maintenance
A <i>skill</i> you are expected to perform from the General Skill Area above:	Monitor motor gasoline and inert gas systems operation and maintenance
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Monitoring MOGAS systems operations • Monitoring inert gas systems operations • Monitoring MOGAS equipment repairs • Monitoring inert gas equipment repairs
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Air Department Standard Operating Procedures (SOP), Chapter 8 (COMNAVAIRPAC-COMNAVAIRLANT 3100.4B) • Naval Ships' Technical Manual, Chapter 542, Gasoline and JP-5 Fuel Systems, Sections 1-3, and 6 (S9086-SP-STM-010/CH-542) • Naval Ships' Technical Manual, Chapter 074, Gas Free Engineering, Sections 20 and 24 (S9086-CH-STM-030/CH-074) • General Specifications for Ships' of the United States Navy, Section 542 (S9AAO-AA-SPN-010/GEN-SPEC) • Naval Ships' Technical Manual, Chapter 593, Pollution Control, Sections 1, 3, and 5 (S9086-T8-STM-010/CH-593) • Environmental and Natural Resources Program Manual, Chapters 3, 10, 16, 19, and 21 (OPNAVINST 5090.1B)
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about all aspects of motor gasoline (MOGAS) and inert gas systems to include operating and maintaining equipment. The questions may be of a general nature or specific to a type of equipment or procedure.

Advancement Handbook for ABF1

General ABF <i>Skill Area</i>	Shore Base Operations
A <i>skill</i> you are expected to perform from the General Skill Area above:	Monitor shore base refueling and defueling operations
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Refueling ships and barges • Receiving fuel from barges and tankers • Operating control and pump houses • Operating oil and water separators • Monitoring compliance with pre/post operational inspections • Monitoring cathodic protection systems
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Aircraft Refueling NATOPS Manual, Chapters 9-12, 14, and 16-19 (NAVAIR 00-80T-109) • Fuel Management Ashore, Chapters 2, 3, and 7-10 (NAVSUP PUB 558) • Department of Defense Handbook, Petroleum Fuels Facilities, Sections 2, 3, 5, and 11 (MIL-HDBK-1022) • Military Handbook, Electrical Engineering Cathodic Protection, Sections 2-4, 8, 11, 12, and Appendix A (MIL-HDBK-1004/10) • Maintenance and Operation of Petroleum Fuel Facilities, NAVFAC MO-230, Chapters 1, 2, 4, and 5 (NAVFAC 0525-LP-452-4800)
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about all aspects of the shore base fueling and defueling operation to include receiving, storing, and issuing. The questions may be of a general nature or specific to a type of equipment or procedure.

Advancement Handbook for ABF1

General ABF <i>Skill Area</i>	Aviation Fuels Technical Administration
A <i>skill</i> you are expected to perform from the General Skill Area above:	Prepare and review administrative reports
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Preparing aviation fuels sounding report • Preparing underway replenishment bill • Documenting aviation fuels equipment and material deficiencies on current ship's maintenance projects (CSMP) • Performing material inspection of aviation fuels spaces • Coordinating aviation fuels ship's force work list (SFWL)
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Air Department Standard Operating Procedures (SOP), Chapter 8 (COMNAVAIRPAC/COMNAVAIRLANT 3100.4B) • Fuels Management Afloat Manual, Chapter 3 (CINCLANTFLTINST/CINCPACFLTINST 4026.1) • Aircraft Refueling NATOPS Manual, Chapter 1 (NAVAIR 00-80T-109) • Naval Ships' Technical Manual, Chapter 541, Ship Fuel and Fuel Systems, Section 1 (S9086-SN-STM-010/CH-541) • Naval Ships' Technical Manual, Chapter 542, Gasoline and JP-5 Fuel Systems, Sections 1 and 4 (S9086-SP-STM-010/CH-542) • Ships Maintenance Material Management, Chapters 2, 3, 6, and Appendix E (OPNAVINST 4790.4C)

<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about all aspects of the fuels division administrative reports. The questions may be of a general nature or specific to a type equipment or procedure.</p>
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Part 4

Advancement Handbook for ABFC

Advancement Handbook for ABFC

General ABF <i>Skill Area</i>	JP-5 Below Decks System Operations
A <i>skill</i> you are expected to perform from the General Skill Area above:	Coordinate below decks systems operations
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Coordinating tank emptying sequence • Monitoring tank emptying sequence • Coordinating tank filling sequence • Monitoring tank filling sequence • Coordinating JP-5 below decks systems operations
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Aircraft Refueling NATOPS Manual, Chapters 3-7 (NAVAIR 00-80T-109) • Aviation Fuel Systems, Volume 2, Chapters 4-11 (NAVSEA 0905-LP-092-4050) • Air Department Standard Operating Procedures (SOP), Chapter 8 (COMNAVAIRPAC-COMNAVAIRLANT 3100.4B) • Fuels Management Afloat Manual, Chapters 2-4 (CINCLANTFLTINST/CINCPACFLTINST 4026.1) • Naval Ships' Technical Manual, Chapter 541, Ship Fuel and Fuel Systems, Sections 1-10 (S9086-SN-STM-010/CH-541) • Naval Ships' Technical Manual, Chapter 542, Gasoline and Fuel Systems, Sections 1-7 (S9086-SP-STM-010/CH-542) • General Specifications for Ships' of the United States Navy, Section 542 (S9AAO-AA-SPN-010/GEN-SPEC)

<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about all aspects of the JP-5 below decks systems operation including equipment-operating procedures. The questions may be of a general nature or specific to a type equipment or procedure.</p>
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Advancement Handbook for ABFC

General ABF <i>Skill Area</i>	JP-5 Below Decks System Maintenance
A <i>skill</i> you are expected to perform from the General Skill Area above:	Coordinate below decks systems maintenance
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Coordinating equipment troubleshooting • Coordinating equipment repairs • Coordinating equipment overhauls
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Aviation Fuel Systems, Volume 2, Chapter 2 (NAVSEA 0905-LP-092-4050) • Air Department Standard Operating Procedures (SOP), Chapter 8 (COMNAVAIRPAC-COMNAVAIRLANT 3100.4B) • Aircraft Refueling NATOPS Manual, Chapter 7 (NAVAIR 00-80T-109) • Naval Ships' Technical Manual, Chapter 541, Ship Fuel and Fuel Systems, Section 8 (S9086-SN-STM-010/CH-541) • Naval Ships' Technical Manual, Chapter 542, Gasoline and JP-5 Fuel Systems, Sections 3, 4, and 6 (S9086-SP-STM-010/CH-542) • General Specifications for Ships' of the United States Navy, Section 542 (S9AAO-AA-SPN-010/GEN-SPEC) • Ships Maintenance Material Management, Chapters 3-7 (OPNAVINST 4790.4C) • Joint Fleet Maintenance Manual, Volume Five, Part-II, Chapters 2-10 (CINCLANT-CINCPACFLTINST 4790.3)

<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about all aspects of maintaining JP-5 below decks operating equipment. The questions may be of a general nature or specific to a type equipment or procedure.</p>
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Advancement Handbook for ABFC

General ABF <i>Skill Area</i>	Flight and Hanger Deck Operations
A <i>skill</i> you are expected to perform from the General Skill Area above:	Coordinate flight and hanger deck operations
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Coordinating flight deck emergency procedures • Coordinating hanger bay emergency procedures • Coordinating refueling operations • Coordinating defuel operations • Coordinating emergency defueling procedures • Coordinating underway replenishment station operations • Coordinating support equipment refueling operations • Coordinating ship's boats refueling operations
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Aviation Fuel Systems, Volume 2, Chapters 5 and 8 (NAVSEA 0905-LP-092-4050) • Air Department Standard Operating Procedures (SOP), Chapter 8 (COMNAVAIRPAC-COMNAVAIRLANT 3100.4B) • Naval Ships' Technical Manual, Chapter 541, Ship Fuel and Fuel Systems, Sections 1, 4, and 9 (S9086-SN-STM-010/CH-541) • Naval Ships' Technical Manual, Chapter 542, Gasoline and JP-5 Fuel Systems, Sections 1, 4, and 6 (S9086-SP-STM-010/CH-542) • Aircraft Refueling NATOPS Manual, Chapters 5 and 6 (NAVAIR 00-80T-109) • CV NATOPS Manual, Chapter 6 (NAVAIR 00-80T-105) • General Specifications for Ships' of the United States Navy, Section 542 (S9AAO-AA-SPN-010/GEN-SPEC)

<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about all aspects of flight and hanger deck operations and equipment. The questions may be of a general nature or specific to a type of equipment or procedure.</p>
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Advancement Handbook for ABFC

General ABF <i>Skill Area</i>	Flight and Hanger Deck Equipment Maintenance
A <i>skill</i> you are expected to perform from the General Skill Area above:	Monitor fueling and defueling equipment maintenance
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Coordinating flight deck equipment repairs • Coordinating hanger deck equipment repairs • Coordinating flight deck equipment overhauls • Coordinating hanger deck equipment overhauls
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Aviation Fuel Systems, Volume 2, Chapters 2 and 5 (NAVSEA 0905-LP-092-4050) • Air Department Standard Operating Procedures (SOP), Chapter 8 (COMNAVAIRPAC-COMNAVAIRLANT 3100.4B) • Naval Ships' Technical Manual, Chapter 541, Ship Fuel and Fuel Systems, Section 8 (S9086-SN-STM-010/CH-541) • Naval Ships' Technical Manual, Chapter 542, Gasoline and JP-5-Fuel Systems, Sections 1, 2, and 6 (S9086-SP-STM-010/CH-542) • Aircraft Refueling NATOPS Manual, Chapter 7 (NAVAIR 00-80T-109) • General Specifications for Ships' of the United States Navy, Section 542 (S9AAO-AA-SPN-010/GEN-SPEC) • Ships Maintenance Material Management, Chapters 3-7 (OPNAVINST 4790.4C) • Joint Fleet Maintenance Manual, Volume Five, Part-II, Chapters 2-10 (CINCLANT-CINCPACFLTINST 4790.3)

<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about all aspects of maintaining and overhauling flight and hanger deck refueling and defueling stations and associated equipment. The questions may be of a general nature or specific to a type of equipment or procedure.</p>
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Advancement Handbook for ABFC

General ABF <i>Skill Area</i>	Motor Gasoline (MOGAS) and Inert gas Systems Operation and Maintenance
A <i>skill</i> you are expected to perform from the General Skill Area above:	Monitor motor gasoline and inert gas systems operation and maintenance
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Coordinating MOGAS systems operations • Coordinating inert gas systems operations • Coordinating MOGAS equipment repairs • Coordinating inert gas equipment repairs
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Air Department Standard Operating Procedures (SOP), Chapter 8 (COMNAVAIRPAC-COMNAVAIRLANT 3100.4B) • Naval Ships' Technical Manual, Chapter 542, Gasoline and JP-5 Fuel Systems, Sections 1-3 and 6 (S9086-SP-STM-010/CH-542) • Naval Ships' Technical Manual, Chapter 074, Gas Free Engineering, Sections 20 and 24 (S9086-CH-STM-030/CH-074) • General Specifications for Ships' of the United States Navy, Section 542 (S9AAO-AA-SPN-010/GEN-SPEC) • Ships Maintenance Material Management, Chapters 3-7 (OPNAVINST 4790.4C) • Joint Fleet Maintenance Manual, Volume Five, Part-II, Chapters 2-10 (CINCLANT-CINCPACFLTINST 4790.3)
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about all aspects of motor gasoline (MOGAS) and inert gas systems to include operating and maintaining equipment. The questions may be of a general nature or specific to a type of equipment or procedure.

Advancement Handbook for ABFC

General ABF <i>Skill Area</i>	Aviation Fuels Technical Administration
A <i>skill</i> you are expected to perform from the General Skill Area above:	Prepare and review administrative reports
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Preparing aviation fuels casualty reports • Preparing aviation fuels daily fuel reports • Reviewing divisional logs, records, and reports
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Air Department Standard Operating Procedures (SOP), Chapter 8 (COMNAVAIRPAC/COMNAVAIRLANT 3100.4B) • Fuels Management Afloat Manual, Chapter 3 (CINCLANTFLTINST/CINCPACFLTINST 4026.1)
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about all aspects of the fuels division administrative reports. The questions may be of a general nature or specific to a type equipment or procedure.

Advancement Handbook for ABFC

General ABF <i>Skill Area</i>	Aviation Fuels Technical Administration
A <i>skill</i> you are expected to perform from the General Skill Area above:	Requisition fuels and lubricating oils
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Maintaining JP-5 issue and receipt ledgers • Maintaining lube oil issue and receipt ledgers • Requisitioning fuels and lubricating oils • Performing fuel audits
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Air Department Standard Operating Procedures (SOP), Chapter 8 (COMNAVAIRPAC/COMNAVAIRLANT 3100.4B) • Fuels Management Afloat Manual, Chapter 3 (CINCLANTFLTINST/CINCPACFLTINST 4026.1) • Naval Supply Procedures, Afloat Supply, Volume One, Chapter 8 (NAVSUP P-485)
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about all aspects of requisitioning fuels and lubricating oils. The questions may be of a general nature or specific to a type equipment or procedure.

Advancement Handbook for ABFC

General ABF <i>Skill Area</i>	Aviation Fuels Technical Administration
A <i>skill</i> you are expected to perform from the General Skill Area above:	Prepare, evaluate, and review overhaul work packages, maintenance requirements, and requests for technical assistance
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Reviewing overhaul work packages • Evaluating maintenance requirements • Submitting requests for technical assistance • Evaluating divisional equipment overhaul procedures
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Ships Maintenance Material Management, Chapters 2, 3, 6-8, and Appendix E (OPNAVINST 4790.4C) • Joint Fleet Maintenance Manual, Volume Five, Part-II, Chapters 2-10 (CINCLANT-CINCPACFLTINST 4790.3)
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about all aspects of preparing, evaluating, and reviewing overhaul work packages, maintenance requirements, and requests for technical assistance. The questions may be of a general nature or specific to a type equipment or procedure.

Appendix A

References Used in This Advancement Handbook

Rating	Short Title	Long Title	Chapters/ Paragraphs	Stocking Point
ABF3	NAVSEA 0905-LP-092-4050	Aviation Fuels Systems, Volume 2	Chapters 3, 5, 7, 8, 9, & 10	Note 7
	COMNAVAIRLANT/ COMNAVAIRPAC 3100.4B	Air Department Standard Operating Procedures (SOP)	Chapter 8	Note 2
	CINCLANTFLTINST/ CINCPACFLTINST 4026.1	Fuels Management Afloat Manual	Chapter 4	Note 8
	S9086-SN-STM-010/ CH-541	Naval Ships' Technical Manual, Chapter 541, Ship Fuel and Fuel Systems	Sections 1 through 10	Note 1
	S9086-SP-STM-010/ CH-542	Naval Ships' Technical Manual, Chapter 542, Gasoline and JP-5 Fuel Systems	Sections 1 through 7	Note 1
	NAVAIR 00-80T-105	CV NATOPS Manual	Chapter 6	Note 1
	NAVAIR 00-80T-109	Aircraft Refueling NATOPS Manual	Chapters 1, 3, 5, 6, 7, 9, 10, 11, 12, 14, 15, 16, 17, 18, & Appendix A	Note 1
	MIL-HDBK-844 (AS)	Aircraft Refueling Handbook	Chapters 4, 5, 6, & Appendix C	Note 3

Rating	Short Title	Long Title	Chapters/ Paragraphs	Stocking Point
ABF3 (Cont)	MIL-HDBK-200G	Military Standardization Handbook, Quality Surveillance Handbook for Fuels, Lubrication, and Related Products	Chapters 3, 4, 5, 9, 12, Appendices G, H, & Tables III & X	Note 3
	S6225-YE-MMA-010	Maintenance Manual for JP-5 Pump Model X2NFB-NHROV, Auxiliary	Chapters 2 & 3	Note 1
	S6226-E7-MMI-010/ 07524	Maintenance Manual for JP-5 Tank Stripping Pump	Chapters 1 & 2	Note 1
	S6225-Z9-MMA-010/ 07524	Maintenance Manual for JP-5 Transfer Pumps Model X3NF-GMA, (200-GPM)	Chapters 2, 3, 5, & 6	Note 1
	S6226-MT-MMI-010	Maintenance Manual for JP-5 Transfer Pump Model NO BHXL4NFD-TB, (300-GPM) Description, Operation, and Maintenance	Chapters 2, 3, 5, & 6	Note 1
	S6225-T9-MMA-010	JP-5 Pumps Drawing Numbers, AB294-0541-000 and 294-0628-000	Chapters 1, 2, 5, & 6	Note 1
	S9550-AK-MMM-010	Technical Manual for 300 G.P.M. Filter Separator	Section 2	Note 1
	S9550-AL-MMM-010/ GFS-134-58-V-2000	Technical Manual for 2,000 G.P.M. Filter Separator	Sections 2 & 3	Note 1

Rating	Short Title	Long Title	Chapters/ Paragraphs	Stocking Point
ABF3 (Cont)	S9542-AB-MMO-010	Description, Operation, and Maintenance, JP-5 Jet Fuel Centrifugal Purifier	Chapters 1 through 6	Note 1
	NAVSEA 0965-LP-080-3010	Operation, Maintenance, Installation of Delaval, Gems Sensors Division Tank Level Indicating and Control System (TLICS) Volume One of Two	Chapters 1 through 7,	Note 1
	NAVSEA 0965-LP-060-1010	Maintenance, Grooming, and Troubleshooting Instructions, Tank Level Indicating (TLI) System	Chapters 1, 2, 4, 5, & 7	Note 1
	S6435-PB-MMA-010/ 52374	Maintenance Manual for Limiter Valve Operators Type LT-130, LT-150, LT-550	Sections 1, 4, 5, & 6	Note 1
	S9542-AL-MMM-010	Aircraft Fuel/Defuel Stations in CV and CVN'S with Cla-Val Installations	Chapters 1 through 5	Note 1
	SG120-AB-MMO-010	Electrical Continuity Control System for Aircraft JP-5 Fueling Stations	Sections 1 through 5	Note 9

Rating	Short Title	Long Title	Chapters/ Paragraphs	Stocking Point
ABF3 (Cont)	MIL-HDBK-274(AS)	Military Handbook Electrical Grounding for Aircraft Safety	Sections 1 through 5	Note 3
	NAVAIR 12-1CA-1	Pressure Fuel Servicing Locking Nozzle, Technical Manual	Sections 1 through 7	Note 1
	S9086-CH-STM-030/ CH-074	Naval Ships' Technical Manual Chapter 074, Volume 3, Gas Free Engineering	Sections 20, 21, & 24	Note 1
	S9086-RK-STM-010/ CH-505	Naval Ships' Technical Manual, Chapter 505, Piping Systems	Sections 1, 5, 6, 7, 8, 9, & 10	Note 1
	S9068-CN-STM-020/ CH-079	Naval Ships' Technical Manual, Chapter 079, Volume 2-Damage Control Practical Damage Control	Chapters 21, 25, 30, & 34	Note 1
	S0986-S3-STM-010/ CH-555V1	Naval Ships' Technical Manual, Chapter 555-Volume 3, Surface Ships Fire Fighting	Section 2	Note 1
	(S9086-RH-STM-010/ CH-503)	Naval Ships' Technical Manual, Chapter 503, PUMPS	Section 2	Note 1
	S9086-T8-STM-010/ CH-593	Naval Ships' Technical Manual, Chapter 593, Pollution Control	Sections 1, 3, & 5	Note 1

Rating	Short Title	Long Title	Chapters/ Paragraphs	Stocking Point
ABF3 (Cont)	OPNAVINST 5100.19C	Naval Occupational Safety and Health (NAVOSH) Program manual for Forces Afloat, Volume One, Two, and Three	Chapter C-10	Note 4
	OPNAVINST 5090.1B	Enviromental and Natural Resources Program Manual	Chapters 3, 10, 16, 19, & 21	Note 4
	NAVSUP PUB 558	Fuel Management Ashore	Chapters 2, 4, 5, 7, 8, 9, & 10	Notes 1 & 5
	MIL-HDBK-1022	Department of Defense Handbook, Petroleum Fuels Facilities	Sections 3, 4, & 7	Note 3
	MIL-HDBK-1004/10	Military Handbook, Electrical Engineering Cathodic Protection	Sections 1, 2, & 3	Note 3
	NAVFAC 0525-LP-452-4800	Maintenance and Operation of Petroleum Fuel Facilities	Chapters 1 through 5	Note 1
	OPNAVINST 4790.4G	The Naval Aviation Maintenance Program (NAMP), Volume V	Chapter 19	Note 4
	NAVAIR A1-NAOSH-SAF-000/P-5100-1	Technical Manual, NAVAIROSH Requirements for the Shore Establishment	Chapters 1, 3, 5, 6, & 7	Note 1
	S9AAO-AA-SPN-010/GEN-SPEC	General Specifications for Ships' of the United States Navy	Section 542	Note 1
ABF2	NAVSEA 0905-LP-092-4050	Aviation Fuels Systems, Volume 2	Chapters 3, through 11	Note 7

Rating	Short Title	Long Title	Chapters/ Paragraphs	Stocking Point
ABF2 (Cont)	COMNAVAIRLANT/ COMNAVAIRPAC 3100.4B	Air Department Standard Operating Procedures (SOP)	Chapter 8	Note 2
	CINCLANTFLTINST/ CINCPACFLTINST 4026.1	Fuels Management Afloat Manual	Chapter 4	Note 8
	S9086-SN-STM-010/ CH-541	Naval Ships' Technical Manual, Chapter 541, Ship Fuel and Fuel Systems	Sections 1, 3, 4, 5, 6, 8, 9, 10, & 15	Note 1
	S9086-SP-STM-010/ CH-542	Naval Ships' Technical Manual, Chapter 542, Gasoline and JP-5 Fuel Systems	Sections 1 through 7	Note 1
	NAVAIR 00-80T-105	CV NATOPS Manual	Chapter 6	Note 1
	NAVAIR 00-80T-109	Aircraft Refueling NATOPS Manual	Chapters 1, 2, 3, 5, 6, 9, 10, 11, 12, 14, 15, 16, 17, 18, & Appendix A	Note 1
	MIL-HDBK-844 (AS)	Aircraft Refueling Handbook	Chapters 2, 4, 5, 6, & Appendix B	Note 3
	MIL-HDBK-200G	Military Standardization Handbook, Quality Surveillance Handbook for Fuels, Lubrication, and Related Products	Chapters 4, 5, 9, Appendix I & Table III	Note 3
	S6225-YE-MMA-010	Maintenance Manual for JP-5 Pump Model X2NFB-NHROV, Auxiliary	Chapters 4, 5, & 6	Note 1

Rating	Short Title	Long Title	Chapters/ Paragraphs	Stocking Point
ABF2 (Cont)	S6226-E7-MMI-010/ 07524	Maintenance Manual for JP-5 Tank Stripping Pump	Chapter 4	Note 1
	S6225-Z9-MMA-010/ 07524	Maintenance Manual for JP-5 Transfer Pumps Model X3NF-GMA, (200-GPM)	Chapters 2, 5, & 6	Note 1
	S6226-MT-MMI-010	Maintenance Manual for JP-5 Transfer Pump Model NO BHXL4NFD-TB, (300-GPM) Description, Operation, and Maintenance	Chapters 2, 5, & 6	Note 1
	S6225-T9-MMA-010	JP-5 Pumps Drawing Numbers, AB294-0541-000 and 294-0628-000	Chapters 2, 5, & 6	Note 1
	S9550-AK-MMM-010	Technical Manual for 300 G.P.M. Filter Separator	Section 4	Note 1
	S9550-AL-MMM-010/ GFS-134-58-V-2000	Technical Manual for 2,000 G.P.M. Filter Separator	Section 4	Note 1
	S6436-AZ-MMA-010	Type 1 Technical Manual for JP-5 Fuel Filter GF-5-V-CU-NI (Pre-Filter)	Section 7	Note 1
	S9542-AB-MMO-010	Description, Operation, and Maintenance, JP-5 Jet Fuel Centrifugal Purifier	Chapters 4, 5, & 6	Note 1

Rating	Short Title	Long Title	Chapters/ Paragraphs	Stocking Point
ABF2 (Cont)	NAVSEA 0965-LP-080-3010	Operation, Maintenance, Installation of Delaval, Gems Sensors Division Tank Level Indicating and Control System (TLICS) Volume One of Two	Chapters 1 through 7	Note 1
	NAVSEA 0965-LP-060-1010	Maintenance, Grooming, and Troubleshooting Instructions, Tank Level Indicating (TLI) System	Chapters 1, 2, 4, 5, & 7	Note 1
	S6435-PB-MMA-010/ 52374	Maintenance Manual for Limitorque Valve Operators Type LT-130, LT-150, LT-550	Sections 1, 4, 5, & 6	Note 1
	S9542-AL-MMM-010	Aircraft Fuel/Defuel Stations in CV and CVN'S with Cla-Val Installations	Chapters 1 through 6	Note 1
	SG120-AB-MMO-010	Electrical Continuity Control System for Aircraft JP-5 Fueling Stations	Sections 2 through 5	Note 9
	NAVAIR 12-1CA-1	Pressure Fuel Servicing Locking Nozzle, Technical Manual	Sections 2 through 8	Note 1
	S9086-CH-STM-030/ CH-074	Naval Ships' Technical Manual Chapter 074, Volume 3, Gas Free Engineering	Sections 20, 21, & 24	Note 1

Rating	Short Title	Long Title	Chapters/ Paragraphs	Stocking Point
ABF2 (Cont)	S9086-RK-STM-010/ CH-505	Naval Ships' Technical Manual, Chapter 505, Piping Systems	Sections 1, 5, 6, 7, 8, 9, & 10	Note 1
	S9068-CN-STM-020/ CH-079	Naval Ships' Technical Manual, Chapter 079, Volume 2-Damage Control Practical Damage Control	Chapters 21, 34, & 42	Note 1
	S0986-S3-STM-010/ CH-555V1	Naval Ships' Technical Manual, Chapter 555-Volume 3, Surface Ships Fire Fighting	Section 3	Note 1
	S9086-T8-STM-010/ CH-593	Naval Ships' Technical Manual, Chapter 593, Pollution Control	Sections 1, 3, & 5	Note 1
	NAVSUP PUB 558	Fuel Management Ashore	Chapters 2, 3, 7, 8, 9, & 10	Notes 1 & 5
	MIL-HDBK-1022	Department of Defense Handbook, Petroleum Fuels Facilities	Sections 2, 3, 4, 8, 9, & 12	Note 3
	MIL-HDBK-1004/10	Military Handbook, Electrical Engineering Cathodic Protection	Sections 1, 2, & 3	Note 3
	NAVFAC 0525-LP-452-4800	Maintenance and Operation of Petroleum Fuel Facilities	Chapters 1, 2, & 5	Note 1
	S9AAO-AA-SPN-010/ GEN-SPEC	General Specifications for Ships' of the United States Navy	Section 542	Note 1

Rating	Short Title	Long Title	Chapters/ Paragraphs	Stocking Point
ABF1	NAVSEA 0905-LP-092-4050	Aviation Fuels Systems, Volume 2	Chapters 1, 2, 4, 5, 6, 7, 8, 9, & 10	Note 7
	COMNAVAIRLANT/ COMNAVAIRPAC 3100.4B	Air Department Standard Operating Procedures (SOP)	Chapter 8	Note 2
	CINCLANTFLTINST/ CINCPACFLTINST 4026.1	Fuels Management Afloat Manual	Chapters 2, 3, & 4	Note 8
	S9086-SN-STM-010/ CH-541	Naval Ships' Technical Manual, Chapter 541, Ship Fuel and Fuel Systems	Sections 1, 3, 4, 5, 6, 7, 8, 9, & 10	Note 1
	S9086-SP-STM-010/ CH-542	Naval Ships' Technical Manual, Chapter 542, Gasoline and JP-5 Fuel Systems	Sections 1, 2, 3, 4, 5, 6, & 7	Note 1
	NAVAIR 00-80T-105	CV NATOPS Manual	Chapter 6	Note 1
	NAVAIR 00-80T-109	Aircraft Refueling NATOPS Manual	Chapters 1, 3, 4, 5, 6, 7, 9, 10, 11, 12, 14, 16, 17, 18, & 19	Note 1
	S6225-T9-MMA-010	JP-5 Pumps Drawing Numbers, AB294-0541-000 and 294-0628-000	Chapters 5, & 6	Note 1
	S9550-AK-MMM-010	Technical Manual for 300 G.P.M. Filter Separator	Sections 3, 4, & 5	Note 1
	S9550-AL-MMM-010/ GFS-134-58-V-2000	Technical Manual f or 2,000 G.P.M. Filter Separator	Sections 3 & 4	Note 1

Rating	Short Title	Long Title	Chapters/ Paragraphs	Stocking Point
ABF1 (Cont)	S9542-AB-MMO-010	Description, Operation, and Maintenance, JP-5 Jet Fuel Centrifugal Purifier	Chapters 5 & 6	Note 1
	S9542-AL-MMM-010	Aircraft Fuel/Defuel Stations in CV and CVN'S with Cla-Val Installations	Chapters 2 & 3	Note 1
	S9542-AL-MMM-010	Aircraft Fuel/Defuel Station s in CV and CVN'S with Cla-Val Installations	Chapters 1 through 6	Note 1
	S9086-CH-STM-030/ CH-074	Naval Ships' Technical Manual Chapter 074, Volume 3, Gas Free Engineering	Sections 20 & 24	Note 1
	S9086-RK-STM-010/ CH-505	Naval Ships' Technical Manual, Chapter 505, Piping Systems	Sections 1, 8, & 10	Note 1
	S9068-CN-STM-020/ CH-079	Naval Ships' Technical Manual, Chapter 079, Volume 2-Damage Control Practical Damage Control	Chapter 40	Note 1
	S0986-S3-STM-010/ CH-555V1	Naval Ships' Technical Manual, Chapter 555, Volume 3, Surface Ships Fire Fighting	Section 5 & 8	Note 1
	S9086-RH-STM-010/ CH-503	Naval Ships' Technical Manual, PUMPS	Sections 1 & 2	Note 1

Rating	Short Title	Long Title	Chapters/ Paragraphs	Stocking Point
ABF1 (Cont)	S9086-T8-STM-010/ CH-593	Naval Ships' Technical Manual, Chapter 593, Pollution Control	Sections 1, 3, & 5	Note 1
	OPNAVINST 5090.1B	Environmental and Natural Resources Program Manual	Chapters 3, 10, 16, 19, & 21	Note 4
	NAVSUP PUB 558	Fuel Management Ashore	Chapters 2, 3, 7, 8, 9, & 10	Notes 1 & 5
	MIL-HDBK-1022	Department of Defense Handbook, Petroleum Fuels Facilities	Sections 2, 3, 5, & 11	Note 3
	MIL-HDBK-1004/10	Military Handbook, Electrical Engineering Cathodic Protection	Sections 2, 3, 4, 8, 11, 12, & Appendix A	Note 3
	NAVFAC 0525-LP-452-4800	Maintenance and Operation of Petroleum Fuel Facilities, NAVFAC MO-230	Chapters 1, 2, 4, & 5	Note 1
	OPNAVINST 4790.4C	Ships Maintenance Material Management (3-M)	Chapters 2, 3, 6, & Appendix E	Note 4
	S9AAO-AA-SPN-010/ GEN-SPEC	General Specifications for Ships' of the United States Navy	Section 542	Note 1
ABFC	NAVSEA 0905-LP-092-4050	Aviation Fuels Systems, Volume 2	Chapters 2 through 11	Note 7
	COMNAVAIRPAC/ COMNAVAIRLANT 3100.4B	Air Department Standard Operating Procedures (SOP)	Chapter 8	Note 2
	CINCLANTFLTINST/ CINCPACFLTINST 4026.1	Fuels Management Afloat Manual	Chapters 2, 3, & 4	Note 8

Rating	Short Title	Long Title	Chapters/ Paragraphs	Stocking Point
ABFC (Cont)	S9086-SN-STM-010/ CH-541	Naval Ships' Technical Manual, Chapter 541, Ship Fuel and Fuel Systems	Sections 1 through 10	Note 1
	S9086-SP-STM-010/ CH-542	Naval Ships' Technical Manual, Chapter 542, Gasoline and JP-5 Fuel Systems	Sections 1 through 7	Note 1
	NAVAIR 00-80T-105	CV NATOPS Manual	Chapter 6	Note 1
	NAVAIR 00-80T-109	Aircraft Refueling NATOPS Manual	Chapters 3 through 7	Note 1
	S9086-CH-STM-030/ CH-074	Naval Ships' Technical Manual Chapter 074, Volume 3, Gas Free Engineering	Sections 20 & 24	Note 1
	OPNAVINST 4790.4C	Ships Maintenance Material Management	Chapters 3 through 8, & Appendix E	Note 4
	CINCLANT- CINCPACFLTINST 4790.3	Joint Fleet Maintenance Manual, Volume Five	Part II Chapters 2 through 10	Notes 4 & 6
	NAVSUP P-485	Naval Supply Procedures, Afloat Supply, Volume One	Chapter 8	Notes 1 & 5
	S9AAO-AA-SPN-010/ GEN-SPEC	General Specifications for Ships' of the United States Navy	Section 542	Note 1

LEGEND:

Note 1 - To order, MILSTRIP to NAVICP PHILA (Stock number from NAVSUP P2002) or via INTERNET – <http://www.nll.navsup.navy.mil/>

Note 2 - Fleet Publications Library CD-ROM:
Letter request to:
 Commanding Officer
 Attention CD-ROM Team Code N911
 NCTAMS LANT
 9625 Moffett Ave
 Norfolk, VA. 23511-2784

Note 3 - INTERNET - <http://dodssp.daps.mil/> or
 DOD index of Specifications and standards
 Part II (Use form DAPS Phila 1425E (10/98)

Note 4 - INTERNET - <http://neds.nebt.daps.mil/>

Note 5 - NAVSUP P-600 (CD-ROM)

Note 6 - INTERNET - <http://www.submepp.navy.mil/PRODSERV.HTM>

Note 7 - INTERNET - <http://www.nll.navsup.navy.mil/nll.cfm>

Note 8 - Fleet Publications on CD ROM
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 DSN: 836-3018/3019

Note 9 - Letter request to:
 Commander
 Naval Supply Systems Command
 Building 309
 5450 Carlise Pike
 PO Box 2020
 Mechanicsburg, PA. 17055-0788